



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

Cur

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/939,163	08/24/2001	Toshiya Yagou	SHC0139	4115

7590

10/03/2003

Micheal S. Gzybowski
Butzel Long
350 South Main Street
STE 300
Ann Arbor, MI 48104

EXAMINER

ANDERSON, CATHARINE L

ART UNIT	PAPER NUMBER
----------	--------------

3761

DATE MAILED: 10/03/2003

//

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/939,163

Applicant(s)

YAGOU ET AL.

Examiner

C. Lynne Anderson

Art Unit

3761

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 15 September 2003 has been entered.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-3, 5, 7-9, and 11 are rejected under 35 U.S.C. 102(e) as being anticipated by Chen et al. (6,395,957).

Chen discloses a body fluid absorbent panel, as shown in figure 1, for a sanitary article, as described in column 3, lines 1-15. The panel comprises a fibrous web having a compression resilience, comprising a plurality of openings 27 extending therethrough, as shown in figure 5. Barriers surround and define the openings 27, and the barriers comprise a shape holding layer 2 and a body fluid retaining layer 1. The shape holding

layer 2 is formed from thermoplastic synthetic resin fibers, as described in column 38, lines 49-66. The shape holding layer 2 and body fluid retaining layer 1 comprise surface areas that are coextensive, i.e. the entire surface of the article, as shown in figure 6. The fibers of the shape holding layer 2 are hot welded together, as described in column 39, lines 1-6. The body fluid retaining layer 1 comprises a mix of thermoplastic synthetic resin fibers and an absorbent material, as described in column 28, lines 51-53. The fibers of the body fluid retaining layer 1 are also hot welded together, as described in column 29, lines 17-18. The shape holding layer 2 and body fluid retaining layer 1 are hot welded to each other, as described in column 39, lines 1-6, at an interface, as shown in figure 5, to form contact points between the shape holding layer 2 and body fluid retaining layer 1.

With respect to claim 2, the absorbent material comprises high absorption polymer particles, as described in column 29, lines 1-3. The shape holding layer 2 and body fluid retaining layer 1 are hot welded to each other, as described in column 39, lines 1-6, at an interface, as shown in figure 5, to form contact points between the shape holding layer 2 and body fluid retaining layer 1.

With respect to claim 3, the barriers comprise first barriers extending parallel to and spaced apart from one another, and second barriers extending parallel to and spaced apart from one another, as shown in figure 6.

With respect to claim 5, the open area of the body fluid absorbent panel is between about 20% and about 80%, as shown in figure 14. The openings 27 have an

Art Unit: 3761

area of about 28 mm², as measured from figure 5, based on the thickness of the shape holding layer 2 disclosed in column 27, lines 32-35.

With respect to claim 7, a ratio between the thickness of the shape holding layer 2 and the body fluid retaining layer 1 is 5:2, as shown in figure 5.

With respect to claim 8, the body fluid retaining layer 1 comprises cellulose fibers, as described in column 28, lines 58-59.

With respect to claims 9 and 11, the body fluid absorbent panel further comprises a mat-like liquid-absorbent core 5, as shown in figure 5, having substantially no openings.

Claims 1, 3, 5, 7-9, and 11-13 are rejected under 35 U.S.C. 102(e) as being anticipated by Shimizu (6,274,218).

Shimizu discloses a body fluid absorbent panel 2 for a sanitary article 1, as shown in figure 1. The body fluid absorbent panel 2 comprises a fibrous web having a plurality of openings 6 and barrier surrounding and defining the openings 6, as shown in figure 2. The body fluid absorbent panel 2 further comprises a shape holding layer 11 formed from a plurality of thermoplastic synthetic resin fibers, as disclosed in column 3, lines 1-4, and a body fluid retaining layer 12, as disclosed in column 3, lines 8-12. The shape holding layer 11 and body fluid retaining layer 12 have patterned surface areas that are coextensive, as shown in figures 1 and 2. The fibers of the shape holding layer 11 are hot welded together, as disclosed in column 3, line 3. The fibers of the body fluid retaining layer 12 are hot welded together, as disclosed in column 3, line 11. The shape

Art Unit: 3761

holding layer 11 and body fluid retaining layer 12 are hot welded to each other along an interface at contact points, as disclosed in column 3, lines 21-23.

With respect to claim 3, the barriers comprise first barriers extending parallel to and spaced apart from each other, and second barrier barriers extending parallel to and spaced apart from each other, as shown in figure 1.

With respect to claim 5, the open area of the body fluid absorbent panel 2 is between about 20% and 80%, as shown in figure 1. The openings have an area of about 20 mm², as disclosed in column 2, lines 54-55.

With respect to claim 7, a ration between the thickness of the shape holding layer 11 and the body fluid retaining layer 12 is between 6:4 and 8:2, as shown in figure 2.

With respect to claims 9 and 11, the body fluid absorbent panel 2 further comprises a mat-like liquid absorbent core 4, as shown in figure 2, having substantially no openings.

With respect to claim 12, the shape holding layer 11 comprises a liquid permeable material, as disclosed in column 3, lines 30-32.

With respect to claim 13, the shape holding layer 11 is capable of absorbing liquid, and surrounds the peripheral edges of each of the openings 6, as shown in figure 2.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

Art Unit: 3761

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 4 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chen et al. (6,395,957) as applied to claim 1 above, and further in view of Colbert (5,479,335).

Chen discloses all aspects of the claimed invention with the exception of a second panel placed upon the first panel such that the openings of one panel are divided by the barriers of the other panel.

Colbert discloses a first panel 2 of fibrous web comprising a plurality of openings surrounded by barriers, as shown in figure 3. A second panel 4, also comprising a plurality of openings surrounded by barriers, is placed upon the first panel such that the barriers of the second panel 4 divide the openings of the first panel 2. This allows the complete structure, comprising both the first panel 2 and the second panel 4, to have smaller openings than either of the individual panels, as disclosed in column 8, lines 25-31.

It would therefore be obvious to one of ordinary skill in the art at the time of invention to place a second panel upon the first panel of Chen, as taught by Colbert, to create a structure having smaller openings than either of the individual panels.

With respect to claim 10, Chen discloses the open area of the body fluid absorbent panel is between about 20% and about 80%, as shown in figure 14. The openings 27 have an area of about 28 mm^2 , as measured from figure 5, based on the thickness of the shape holding layer 2 disclosed in column 27, lines 32-35. Colbert

Art Unit: 3761

discloses a second panel having a total area of openings equal to that of the first panel, as disclosed in column 8, lines 28-29.

Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Chen et al. (6,395,957) as applied to claim 1 above, and further in view of Ellis et al. (5,490,846).

Chen discloses all aspects of the claimed invention but remains silent as to the compression resilience of the panel.

Ellis discloses a body fluid absorbent panel having a compression resilience of at least 60% to ensure that the panel does not collapse during use, as disclosed in column 7, lines 48-55.

It would therefore be obvious to one of ordinary skill in the art at the time of invention to construct the body fluid absorbent panel of Chen with a compression resistance of at least 60%, as taught by Ellis, so that the panel does not collapse during use.

Claims 4 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shimizu (6,274,218) as applied to claim 1 above, and further in view of Colbert (5,479,335).

Shimizu discloses all aspects of the claimed invention with the exception of a second panel placed upon the first panel such that the openings of one panel are divided by the barriers of the other panel.

Colbert discloses a first panel 2 of fibrous web comprising a plurality of openings surrounded by barriers, as shown in figure 3. A second panel 4, also comprising a

Art Unit: 3761

plurality of openings surrounded by barriers, is placed upon the first panel such that the barriers of the second panel 4 divide the openings of the first panel 2. This allows the complete structure, comprising both the first panel 2 and the second panel 4, to have smaller openings than either of the individual panels, as disclosed in column 8, lines 25-31.

It would therefore be obvious to one of ordinary skill in the art at the time of invention to place a second panel upon the first panel of Shimizu, as taught by Colbert, to create a structure having smaller openings than either of the individual panels.

With respect to claim 10, Shimizu discloses the open area of the body fluid absorbent panel 2 is between about 20% and 80%, as shown in figure 1. The openings have an area of about 20 mm², as disclosed in column 2, lines 54-55. Colbert discloses a second panel having a total area of openings equal to that of the first panel, as disclosed in column 8, lines 28-29.

Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shimizu (6,274,218) as applied to claim 1 above, and further in view of Ellis et al. (5,490,846).

Shimizu discloses all aspects of the claimed invention but remains silent as to the compression resilience of the panel.

Ellis discloses a body fluid absorbent panel having a compression resilience of at least 60% to ensure that the panel does not collapse during use, as disclosed in column 7, lines 48-55.

It would therefore be obvious to one of ordinary skill in the art at the time of invention to construct the body fluid absorbent panel of Shimizu with a compression

Art Unit: 3761

resistance of at least 60%, as taught by Ellis, so that the panel does not collapse during use.

Response to Arguments

Applicant's arguments filed 15 July 2003 have been fully considered but they are not persuasive. Chen discloses all aspects of the claimed invention. Chen discloses a shape holding layer and a body fluid retaining layer, as shown in figure 5. The shape holding layer and the body fluid retaining layer each have a patterned surface area. The surface area of each layer covers the entire surface of the absorbent article, as shown in figure 6. The shape holding layer and the body fluid retaining layer therefore have surface areas that are coextensive.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to C. Lynne Anderson whose telephone number is (703) 306-5716. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Weilun Lo can be reached on (703) 308-1957. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1148.



WEILUN LO
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3700

WA
cla